

MISCELLANEOUS NOTES

1. SWIMMING AND LOCOMOTION OF CAPTIVE HEDGEHOGS

To test the swimming powers of a hedgehog a small cement tank, 4' x 4' x 1', was filled with water and one *Paraechinus micropus micropus* Blyth was dropped into it from a height of 3 ft. The animal sank and remained under water for 3 seconds. It then began swimming, keeping its body parallel to the surface of the water. Only the nostrils and tips of the spines were visible. While swimming it kept both pairs of limbs under water. The fully extended limbs moved alternately in a fore and aft motion for the forward propulsion of the animal. It turns by stopping the forearm of the side towards which it desires to take a turn. At the end of the experiment the hinder part of the hedgehog was almost vertical to the water surface.

Every moment the insectivore was trying to come out of the water but was unsuccessful for the wall was too steep to be climbed up. It swam for 5 minutes without showing any sign of fatigue, after which it took a rest of 5 seconds by stopping all movements of its limbs. It began again and during the whole period of 10 minutes it took rest four times, the last time for 9 seconds. A small piece of wood was then thrown in, on to which the hedgehog refused to climb until forced to do so when almost drowning. After coming out of the water it sniffed twice and moved in the corner of the room in which the tank was.

While running the hind limbs provide thrust momentum to the bodies of the hedgehogs (*Hemiechinus auritus collaris* Gray and *Paraechinus micropus micropus* Blyth) while the forelimbs support the heavy front part. The hind limbs occupy a position normal to small running mammals, the feet remaining close together and the soles flat upon the ground when not in motion. During motion the hind feet assume a digitigrade position. Their speed when frightened or when chasing a toad is recorded to be 25 inches per second maximum. Normally they trot at a speed of one foot per second, and can walk for long distances in the night in search of food.

Hedgehogs cannot stand erect on their hind legs like the Indian desert gerbille, *Meriones hurrianæ* Jerdon, but they can climb the wire meshes of the cage. One evening I found one hanging under the roof of the wire cage with its front paws, poking its nose through the meshes.

While entering its burrow the hedgehog moves in the normal manner i.e., the anterior portion enters the burrow first. Space inside the tunnel is so restricted that it was thought impossible for a hedgehog to turn round within. But to our surprise the snout came out first. The roof of the tunnel was then replaced by a glass

sheet and the sideways turning round of the hedgehog with remarkable swiftness in this very narrow space was observed.

DEPT. OF ZOOLOGY,
JASWANT COLLEGE,
JODHPUR,
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ISHWAR PRAKASH

2. EFFECT OF EARTHQUAKE ON ELEPHANTS

Last March, there was quite a severe shock one morning about 6 a.m., when I was camping right inside elephant country on the bank of a river. My own elephant, a tusker, was just approaching me for me to mount, when he started to trumpet. I could then hear wild elephants trumpeting all round, some at a considerable distance, then came the actual 'bump'. Just prior to this, there was a distinct roar as the earthquake was approaching, it was at that period that the wild elephants together with my own were trumpeting.

I had the same experience some ten years ago in the heart of the forest, so it would appear this trumpeting is natural at the time of approach of an earthquake, or anyhow at a time of quite a severe one.

EVERGREEN COTTAGE,
UPPER SHILLONG,
SHILLONG, ASSAM.

FRANK NICHOLLS

3. RORQUAL WHALE NEAR BADAGARA, MALABAR COAST

The carcase of a rorqual whale, *Balaenoptera* sp., was washed ashore near the Government fish curing yard at Badagara on 10th February 1954. It was in a putrid condition without the tail flukes. The body measured 54 ft., the snout being 10½ ft. Each flipper was 10 ft. long. On a search the tail was found at a spot about 3½ miles north of the yard. It measured 8 ft. in length.

A scrutiny of the previous records of stranded whales on the coasts of India since 1748 as listed by Moses (1947) and supplemented by Mathew (1948), Pillai (1949), Gibson-Hill (1950), Chari (1951) and Jones (1953) show that there were only ten instances of stranding of whales along the west coast of Madras State, namely, at Mangalore (1874 & 1891), Madai (1923), Pudiangadi (1924), West Hill (1925), Baliapatnam (1926), Chalai (1927), Vadanapalli (1935), Mulki (1939) and Naduvattam (1947). To these may be added two instances of rorquals washed ashore near Thaikadapuram in April 1949 and near Gangoli in September 1951. The present record brings the total to thirteen.

MARINE BIOLOGICAL STATION,
WEST HILL, MALABAR,
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P. I. CHACKO
M. J. MATHEW